

ABSTRACT

A method for manufacturing a compound semiconductor epitaxial substrate with few concave defects is provided. The method
5 for manufacturing a compound semiconductor epitaxial substrate comprises a step of epitaxially growing an InGaAs layer on an InP single crystal substrate or on an epitaxial layer lattice-matched to the InP single crystal substrate under conditions of ratio of V/III: 10 - 100, growth
10 temperature: 630° C - 700° C, and growth rate: 0.6 $\mu\text{m/h}$ - 2 $\mu\text{m/h}$.